

519,439

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
8 January 2004 (08.01.2004)

PCT

(10) International Publication Number
WO 2004/003446 A1

(51) International Patent Classification⁷: **F25D 23/06**

[US/US]; 1775 Meadow Grove, St. Joseph, MI 49085 (US). MARTINELLA, Luigi [IT/IT]; Via Risorgimento 127, I-28823 Ghiffa (IT). GIUDICI, Giorgia [IT/IT]; Via Fiume 6, I-21015 Lonate Pozzolo (IT).

(21) International Application Number:
PCT/EP2003/006865

(22) International Filing Date: 27 June 2003 (27.06.2003)

(74) Agent: GUERCI, Alessandro; Whirlpool Europe s.r.l., V.le G. Borghi 27, I-21025 Comerio (IT).

(25) Filing Language: English

(81) Designated States (*national*): BR, CA, CN, CZ, IN, JP, KR, MX, NZ, PL, RU, US, ZA.

(30) Priority Data:
02014061.2 1 July 2002 (01.07.2002) EP

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

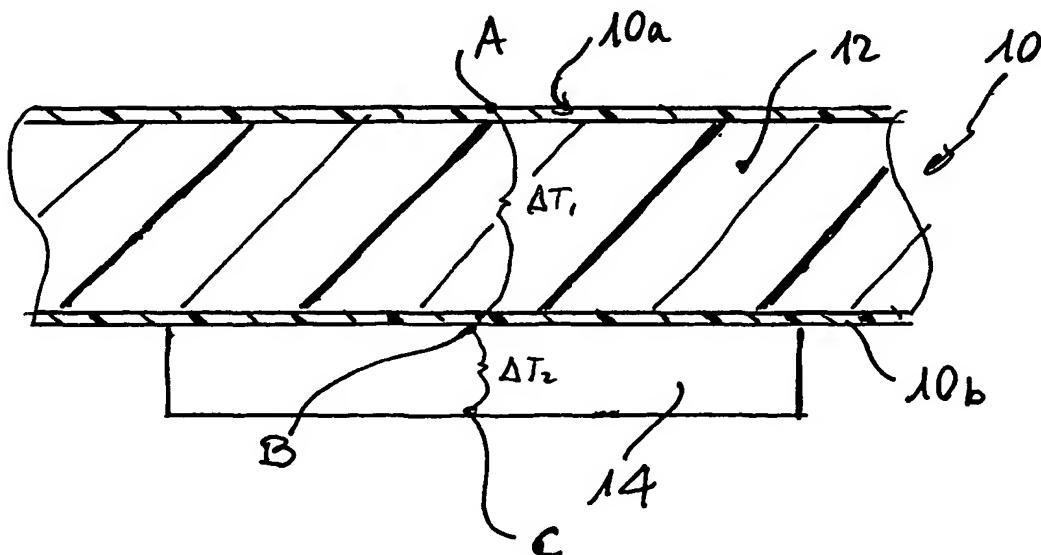
(71) Applicant (*for all designated States except US*):
WHIRLPOOL CORPORATION [US/US]; 2000 M 63, Benton Harbor, MI 49022 (US).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): KIRBY, David /

(54) Title: A VACUUM INSULATED REFRIGERATOR CABINET AND METHOD FOR ASSESSING THERMAL CONDUCTIVITY THEREOF



WO 2004/003446 A1

(57) Abstract: A vacuum insulated refrigerator cabinet comprises an evacuation system for evacuating an insulation space (10) of the cabinet when pressure inside such space is higher than a predetermined value. It comprises a sensor device having an insulation reference element (14) located on one side of said insulation space (10) and temperature sensors (A, B, C) for assessing the differences of temperature (ΔT_1 , ΔT_2) across the insulation space (10) and across the insulation reference element (14), such sensor device being suitable for providing the evacuation system with a signal related to the ratio of the above differences of temperature.